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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,249	06/27/2006	Pedro Stange	02894-742US1	9162
26161	7590	12/05/2007	EXAMINER	
FISH & RICHARDSON PC			KAYES, SEAN PHILLIP	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/565,249	Applicant(s) STANGE ET AL.	
	Examiner Sean Kayes	Art Unit 2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/19/2006</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 21-23 and 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diekmann (US 6916116) in view of Breuer (US 4802255.)

3. With respect to claim 21 Diekmann discloses a method for displaying a time-dependent process, the method comprising:

- applying ("push" 12 figure 1a) a liquid (16 figures 1a-b) onto a porous indicator strip (8, 24, 26, and 30), the strip having a first portion and a second portion opposite the first portion and containing a dye (16 figures 1a-1b; and column 10 lines 49-55); and
- diffusing the dye along the length of the indicator strip at a predetermined rate (see abstract and column 4 lines 35-53.)

Diekmann does not teach the strip disposed on a toothbrush. Diekmann does teach an adhesive layer (36 figures 1b-c) for attaching the device to various devices with shelf lives.

Breuer teaches timing the shelf-life of a toothbrush, for the purpose of knowing when to replace said toothbrush.

At the time of the invention it would have been obvious to one skilled in the art to use Diekmann's device for timing the usable lifespan of a toothbrush as taught by Breuer. The reason for doing so would be to indicate to a user when it is time to replace a toothbrush as taught by Breuer.

4. With respect to claim 22 Diekmann discloses the method according to claim 21, further comprising dissolving the dye in the liquid (16 figures 1a-c; column 4 lines 35-53 and 18 and 28 figure 1b) within a storage capsule located adjacent the first portion of the indicator strip.

5. With respect to claim 23 Diekmann discloses the method according to claim 21, wherein the liquid comprises water (column 10 lines 19-28.)

6. With respect to claim 25 Diekmann discloses the method according to claim 21, wherein the indicator strip comprises cellulose paper (column 9 lines 25-41.)

7. With respect to claim 26 Diekmann discloses the method according to claim 22, wherein the liquid is applied to the second portion of the indicator strip (8 and 24 figure 1b.)

8. With respect to claim 27 Diekmann discloses the method according to claim 22, further comprising applying the liquid (16 figure 1b) to the indicator strip from the storage capsule (14, 20, and 30 figure 1b.)

9. With respect to claim 28 Diekmann discloses the method according to claim 27, further comprising opening the capsule by applying mechanical pressure ("push" 12 figure 1a) to a flexible cladding substantially surrounding the indicator strip and the capsule.

10. With respect to claim 29 Diekman discloses the method according to claim 27, further comprising opening the capsule by actuating a pressure pin (86 figures 2b and 2b'') arranged adjacent the capsule (column 22 lines 37-57 discuss how pressure resistant hollow tube/pin {86 figure 2b} is brought into contact with the reservoir 62 so as to achieve an open pathway by means of the hollow passageway of the pin {94 figure 2b.})

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 30-35 and 37-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Diekmann (US 6916116.)
13. With respect to claim 30 Diekmann discloses a display device for a toothbrush (the reference to a toothbrush is a statement of intended use and subsequently is given little patentable weight), the device comprising:
- a capsule (14 figure 1b) to store a liquid (16 figure 1b) and comprising a seal (20 figure 1b) for controllable release of the liquid; and
 - a porous indicator strip (8, 24, and 32 figure 1b) disposed adjacent to the capsule, the indicator strip having a display surface (6 and 8 figure 1a), a first portion (left portion figure 1b) adjacent the capsule and a second portion (right portion figure 1b) opposite the first portion, the indicator strip comprising a dye (16 figure 1b; and column 10 lines 49-55) configured to adhere to the indicator strip;
 - wherein the indicator strip is configured to diffuse the dye (16 figure 1b) to from the first portion (left side figure 1b) toward the second portion (right side figure 1b) at a predetermined rate and form a line of demarcation along the indicator strip (see abstract; column 4 lines 35-53; and figures 1a, 1a', and 1a".)
14. With respect to claim 31 Diekmann discloses the device of claim 30, further comprising a scale (item 10 figure 1a; "0" through "3" figure 1a) located adjacent the indicator strip to provide an indication of elapsed time.

15. With respect to claim 32 Diekmann discloses the device according to claim 30, wherein the dye is dissolved in the liquid of the storage capsule (16 figure 1b; and column 10 lines 49-55.)

16. With respect to claim 33 Diekmann discloses the device according to claim 30, wherein the dye is disposed along the second portion of the indicator strip (44 and 46 figure 1a".)

17. With respect to claim 34 Diekmann discloses the device according to claim 30, wherein the device is configured to introduce the liquid (28 figure 1b) from the capsule to the dye (16 figure 1b) along the indicator strip (14, 18, and 8 figure 1b; figures 1a, 1a', and 1a".)

18. With respect to claim 35 Diekmann discloses the device according to claim 30, wherein the liquid comprises water (column 10 lines 19-28.)

19. With respect to claim 37 Diekmann discloses the device according to claim 30 wherein the indicator strip comprises cellulose filter paper (column 9 lines 25-41.)

20. With respect to claim 38 Diekmann discloses the device according to claim 30, further comprising a protective cladding (30, 32, and 22 figure 1b) substantially surrounding the indicator strip and the capsule.

21. With respect to claim 39 Diekmann discloses the device according to claim 38, further comprising a mechanical pressure device (20 and 30 figure 1b; "push" 12 figure 1a; and 14 and 16 figures 1a-1b) arranged on an opposite side of the indicator strip facing away from the display surface configured to actuate and burst the capsule.

22. With respect to claim 40 Diekmann discloses a toothbrush comprising:

- a capsule (14 figure 1b) to store a liquid (16 figure 1b) and comprising a seal (20 figure 1b) for controllable release of the liquid; and
- a porous indicator strip (8, 32, and 24 figure 1b) disposed adjacent to the capsule, the indicator strip having a display surface (6 and 8 figure 1a; and figures 1a, 1a', and 1a''), a first portion (left side figures 1a-b) adjacent the capsule and a second portion (right side figures 1a-b) opposite the first portion, the indicator strip comprising a dye (16 figures 1a-1b; and column 10 lines 49-55) configured to adhere to the indicator strip;
- wherein the indicator strip (8, 18, 22, and 32 figure 1b) is configured to diffuse the dye to from the first portion (left) toward the second portion (right) at a predetermined rate and form a line of demarcation along the indicator strip to indicate elapsed time (see abstract; column 4 lines 35-53; and figures 1a, 1a', and 1a'').)

Claim Rejections - 35 USC § 103

23. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

24. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Diekmann (US 6916116) in view of Breuer (US 4802255) in further view of Ko (US 7294379.)

25. With respect to claim 24 Diekmann and Dreuer teach the method according to claim 21.

Diekman does not teach wherein the dye comprises Erythrosin B or Coomassie Brilliant Blue.

Diekman does, however, teach using a blue organic dye (column 10 lines 49-55.)

Commassie brilliant blue and Erythrosin B are particular examples of blue organic dyes.

Ko teaches a similar timing device that utilizes Erythrosin as the dye (column 17 lines 23-45; particularly line 39.)

At the time of the invention it would have been obvious to one skilled in the art to choose a particular blue organic dye for use in Diekmann's device. At the time of the invention it would have been obvious to one skilled in the art to choose Erythrosin as the blue dye for use in Diekman's timing device as taught by Ko. The reason for doing so would be to select a particular dye for use in Diekmann's device so as to construct the device.

26. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Diekmann (US 6916116) in view of Ko (US 7294379.)

With respect to claim 36 Diekman discloses the device according to claim 30.

Diekman does not teach wherein the dye comprises Erythrosin B or Coomassie Brilliant Blue.

Diekman does, however, teach using a blue organic dye (column 10 lines 49-55.)

Commassie brilliant blue and Erythrosin B are particular examples of blue organic dyes.

Ko teaches a similar timing device that utilizes Erythrosin as the dye (column 17 lines 23-45; particularly line 39.)

At the time of the invention it would have been obvious to one skilled in the art to choose a particular blue organic dye for use in Diekmann's device. At the time of the invention it would have been obvious to one skilled in the art to choose Erythrosin as the blue dye for use in Diekman's timing device as taught by Ko. The reason for doing so would be to select a particular dye for use in Diekmann's device so as to construct the device.

Conclusion

27. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

28. Langer (US 5633836) teaches a timing mechanism comprising cellulose, water, and dye.

29. Kagan (US 6373786) teaches a cellulose, water, and dye timing mechanism wherein the capsule is opened by means of a pin/protrusion (of importance to claim 29.)
30. Bommarito (US 6741523) teaches a timing device very similar to that disclosed by Diekmann.
31. Ibitsky (US 7232253) teaches a timing mechanism comprising cellulose, water, and dye.
32. Adamy (US 20040013048) teaches a timing mechanism comprising cellulose, water, and dye.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Kayes whose telephone number is (571) 272-8931. The examiner can normally be reached on 8:00-5:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bradley Paula can be reached on (571) 272-2800 ext 33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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SK
11/21/2007


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